

**Reading Questions for Section 5.1** (6 pts)

Name \_\_\_\_\_

Due Date: \_\_\_\_\_

- (1) 1. The functions  $f(x)$  and  $f(x) + c$  always have the same
- A. Zeros
  - B. Vertical intercept
  - C. Domain
  - D. Range
  - E. None of the above
- (1) 2. The function  $f(x)$  and  $f(x + c)$  always have the same
- A. Zeros
  - B. Vertical intercept
  - C. Domain
  - D. Range
  - E. None of the above
- (1) 3. The graph of  $f(x + c)$ , with  $c > 0$ , is the graph of  $f(x)$  but shifted to the right by  $c$  units.
- A. True
  - B. False
- (1) 4. If  $f(x) = e^x$ , then what is  $f(x + 1)$ ?
- A.  $f(x + 1) = e^x + 1$
  - B.  $f(x + 1) = e^{x+1}$
  - C.  $f(x + 1) = (x + 1)e^x$
  - D. None of the above
- (1) 5. If  $f(x) = e^x$ , then what is  $f(x) + 1$ ?
- A.  $f(x) + 1 = e^x + 1$
  - B.  $f(x) + 1 = e^{x+1}$
  - C.  $f(x) + 1 = (x + 1)e^x$
  - D. None of the above
- (1) 6. If  $f(x) = x^2$ , then what write  $g(x) = (x + 1)^2 + 3$  in terms of  $f(x)$ .
- A.  $g(x) = f(x + 1)^2 + 3$
  - B.  $g(x) = f(x^2 + 1) + 3$
  - C.  $g(x) = f(x + 1) + 3$
  - D.  $g(x) = f(x + 1^2) + 3$
  - E.  $g(x) = f(x + 1) + 3^2$
  - F.  $g(x) = f(x + 1^2) + 3^2$
  - G.  $g(x) = f(x^2 + 1^2) + 3^2$
  - H.  $g(x) = f((x + 1) + 3)^2$
  - I.  $g(x) = f((x + 1) + 3)^2$
  - J. None of these